



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/581,603

02/27/2007

Katsuyuki Wada

1035-641

5465

23117 7590 07/06/2009  
NIXON & VANDERHYE, PC  
901 NORTH GLEBE ROAD, 11TH FLOOR  
ARLINGTON, VA 22203

EXAMINER

ANDERSON, CATHARINE L

ART UNIT

PAPER NUMBER

3761

MAIL DATE

DELIVERY MODE

07/06/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/581,603	<b>Applicant(s)</b> WADA ET AL.	
	<b>Examiner</b> Lynne Anderson	<b>Art Unit</b> 3761	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 April 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 10-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/5/06</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election of Claims 1-9 in the reply filed on 2 April 2009 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 10-14 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected group, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 2 April 2009.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sun et al. (6,514,615) in view of Beihoffer et al. (6,222,091).
5. With respect to claims 1 and 4-5, Sun discloses all aspects of the claimed invention with the exception of the saline flow conductivity and the heat retention indicator. Sun discloses a water-absorbing agent comprising a crosslinked resin polymer that is surface treated, as disclosed in column 4, lines 37-52. The water-absorbing agent has a centrifuge retention capacity of less than 34 g/g, as disclosed in

Art Unit: 3761

column 7, lines 50-54, and an absorbency of less than 30 g/g, as disclosed in column 7, lines 55-62.

6. Sun remains silent as to the heat retention indicator of the water-absorbing agent, but the temperature change on the surface of the water-absorbing resin is inherent to the water-absorbing resin. Since Sun discloses the identical water-absorbing agent as the claimed invention, the water-absorbing agent of Sun will inherently exhibit the claimed heat retention indicators.

7. Beihoffer teaches water-absorbing agents comprising resin polymers, the water-absorbing agents having a saline flow conductivity of  $15 \times 10^{-7} \text{ cm}^3 \text{ sec/g}$ , as disclosed in column 47, lines 27-28. This saline flow conductivity prevents the water-absorbing agent from forming a hydrogel during use, and provides for improved fluid handling, as disclosed in column 36, lines 24-51.

8. It would therefore be obvious to one of ordinary skill in the art at the time of invention to provide the water-absorbing agent of Sun with a saline flow conductivity of  $15 \times 10^{-7} \text{ cm}^3 \text{ sec/g}$ , as taught by Beihoffer, to provide for improved fluid handling.

9. With respect to claims 2 and 6, Sun discloses the water-absorbing agent is particles having diameters from 300-600 micrometers, with 0% being less than 150 micrometers, as disclosed in column 5, lines 41-44.

10. With respect to claim 3, the water-absorbing agent is further provided with inorganic fine particles, as disclosed in column 8, lines 25-27.

11. With respect to claim 7, the water-absorbing agent further comprises a polyol, as disclosed in column 5, lines 18-24.

Art Unit: 3761

12. With respect to claims 8 and 9, the water-absorbing agent is mixed with hydrophilic fibers to form the absorbent core of an absorbent article, as disclosed in column 4, lines 1-11. Absorbent articles such as diapers and sanitary napkins are well-known to comprise a liquid-permeable topsheet and a liquid-impermeable backsheet.

***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art of record discloses water-absorbing resins that have been tested for their centrifuge retention capacity or saline flow conductivity.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynne Anderson whose telephone number is (571)272-4932. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tanya Zalukaeva can be reached on (571) 272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3761

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/L. A./

Examiner, Art Unit 3761

/Tatyana Zalukaeva/

Supervisory Patent Examiner, Art Unit 3761